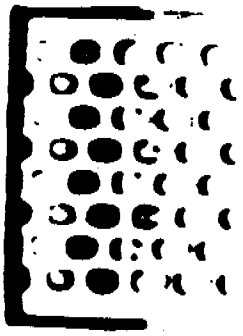
SUBCHAPTER 19. THROUGH SUBCHAPTER 20. (RESERVED)

SUBCHAPTER 21. EMISSION STATEMENTS



Source and Effective Date
R.1993 d.128, effective March 15, 1993 (operative April 20, 1993).
See: 24 N.J.R. 2979(a), 25 N.J.R. 1254(a).

7:27-21.1 Definitions

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

"Actual emissions" means the rate at which an air contaminant is actually emitted, either directly or indirectly, to the outdoor atmosphere, in units of mass per calendar year, seasonal period, or other time period specified in this subchapter.

"Aerodynamic diameter" means the theoretical diameter of a nonspherical particle having the same terminal settling velocity as an equally dense, spherical particle of such diameter.

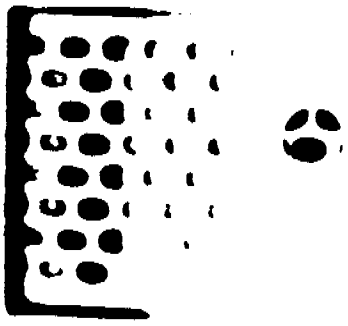
"Air contaminant" means any substance, other than water or distillates of air, present in atmosphere as solid particles, liquid particles, vapors or gases.

"AP-42" means the most recently published edition and any subsequent edition of the manual entitled "Compilation of Air Pollutant Emission Factors" published by the EPA. This document may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, (703) 487-4650 or the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, (202) 783-3228.

"Capture efficiency" means the amount of an air contaminant collected by a control apparatus serving the source operation, expressed as a percentage of the total amount of the air contaminant emitted by the source operation.

"Carbon monoxide" or "CO" means an air contaminant which is a colorless, odorless gas at standard conditions, having a molecular composition of one carbon atom and one oxygen atom.

"Certificate" means either an operating certificate or a temporary operating certificate.



"CFR" means the United States Code of Federal Regulations. This document may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, (202) 783-3228.

"Control apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Control efficiency" means the amount of an air contaminant prevented from being discharged into the outdoor atmosphere by a control apparatus, expressed as a percentage of the total amount of the air contaminant collected by the control apparatus.

"Department" means the New Jersey Department of Environmental Protection and Energy.

"Delivery vessel" means any mobile storage tank including, but not limited to, a marine vessel, tank truck or railroad tank car.

"Distillates of air" means the following chemical species: helium (He), nitrogen (N_2), oxygen (O_2), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), and carbon dioxide (CO_2).

"Emissions information" means, with reference to any source operation, equipment, or control apparatus:

1. Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any air contaminant which has been emitted by the source operation, equipment or control apparatus;

2. Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any air contaminant which, under an applicable standard or limitation, the source operation was authorized to emit (including, to the extent necessary for such purposes, a description of the manner or rate of operation of the source operation), or any combination of the foregoing; and

3. A general description of the location and/or nature of the source operation to the extent necessary to identify the source operation and to distinguish it from other source operations (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source operation).

The following list includes specific data fields which the Department considers to constitute emissions information. This list is not exhaustive and, therefore, other data might be found, in a proper case, to constitute emissions information:

Facility Identification

Plant name and related point identifiers
Address
City
County
AQCR (Air Quality Control Region)
MSA, PMSA, CMSA (Metropolitan Statistical Areas)
State
Zip Code
Ownership and point of contact information
Locational Identifiers:
Latitude & Longitude or UTM Coordinates
SIC Code (Standard Industrial Classification)
Emission point, device or operation description, information
SCC Code (Source Classification Codes)

Emissions Parameters

Emission type (for example, nature of emissions such as CO, paticulate or a specific toxic compound, and origin of emissions such as process vents, storage tanks or equipment leaks)

Emission rate (for example, the amount released to the atmosphere over time such as pounds per hour or tons per year)

Release height (for example, height above ground level where the air contaminant is emitted to the atmosphere)

Description of terrain and surrounding structures (for example, the size of the area, with adjacent structures and terrain descriptions such as mountainous, urban, or rural)

Stack or vent diameter at point of emissions (for example the inside diameter of vent at the point of emission to the atmosphere)

Release velocity

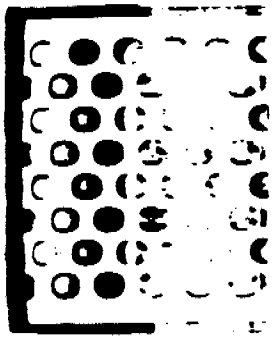
Release temperature

Frequency of release (for example, how often a release occurs in events per year)

Duration of release (for example, the time associated with a release to the atmosphere)

Concentration (for example, the amount of an emission stream constituent relative to other stream constituents, expressed as parts per million (ppm), volume percent, or weight percent)

Density of the emissions stream or average molecular weight (for example, density expressed as fraction or multiple of the density of air; molecular weight)



Boiler or process design capacity (for example, the hourly gross heating value of fuel input to a boiler at its maximum design rate or maximum pounds per hour product rate)

Emission estimation method (for example, the method by which an emission estimate has been calculated such as material balance, stack test, use of AP-42 emission factors, etc.)

Percent space heat (for example, the percent of fuel used for space heating)

Hourly maximum design rate (for example, the greatest operating rate that would be expected for a source in a one hour period)

Control apparatus information (for example, type of primary and secondary control apparatus, capture efficiency, and control efficiency)

"EPA" means the United States Environmental Protection Agency.

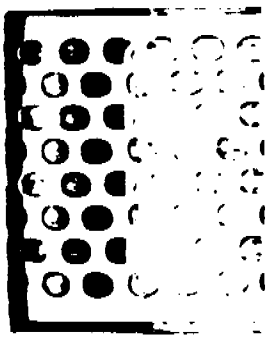
"Equipment" means any device capable of causing the emission of an air contaminant either directly or indirectly to the outdoor atmosphere, and any stack or chimney, conduit, flue, duct, vent, or similar device connected or attached to, or serving the equipment. This term includes, but is not limited to, a device in which the preponderance of the air contaminants emitted is caused by a manufacturing process.

"Facility" means the combination of all structures, buildings, equipment, storage tanks, source operations, and other operations located on one or more contiguous or adjacent properties owned or operated by the same person.

"Federally enforceable" means all limitations and conditions on operation, production, or emissions which can be enforced by EPA pursuant to authorities which include, but are not limited to, those established in:

1. Any NSPS promulgated at 40 CFR 60;
2. Any NESHAP promulgated at 40 CFR 61;
3. Any provision of an applicable State Implementation Plan; or
4. Any permit issued pursuant to the requirements established at 40 CFR 52.21; 40 CFR 51, Subpart I; 40 CFR 70; 40 CFR 71; or N.J.A.C. 7:27.

"Fugitive emissions" means any emissions of an air contaminant released directly or indirectly into the atmosphere which do not pass through a stack or chimney.



"Gasoline" means any petroleum distillate or petroleum distillate/oxygenate blend having a Reid vapor pressure of four pounds per square inch (207 millimeters of mercury) absolute or greater, sold for use or used in a motor vehicle or motor vehicle engine, and commonly or commercially known or sold as gasoline.

"Gasoline dispensing facility" means a facility consisting of one or more stationary gasoline storage tanks together with dispensing devices used to fill vehicle fuel tanks.

"Lead" or "Pb" means elemental lead or any compound containing lead measured as elemental lead.

"Liquid particles" means particles which have volume but are not of rigid shape.

"Manufacturing process" means any action, operation or treatment embracing chemical, industrial, manufacturing or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

"NESHAP" means a National Emission Standard for a Hazardous Air Pollutant as promulgated under 40 CFR 61.

"NSPS" means Standard of Performance for New Stationary Sources as promulgated under 40 CFR 60, commonly referred to as New Source Performance Standards.

"Operating certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act, and in particular N.J.S.A. 26:2C-9.2, which is valid for a period of five years from the date of issuance, unless sooner revoked by the Department.

"Oxides of nitrogen" or "NO_x" means all oxides of nitrogen, except nitrous oxide, as measured by test methods approved by the Department and EPA, such as the test methods set forth at 40 CFR 60 Appendix A Methods 7 through 7E.

"Pb" see "lead."

"Peak carbon monoxide season" means December 1 through the last day of February, inclusive.

"Peak ozone season" means June 1 through August 31, inclusive.

"Permit" means a "Permit to Construct, Install or Alter Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act, and in particular N.J.S.A. 26:2C-9.2.

"Person" means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships and joint stock companies as well as individuals, and shall also include all political subdivisions of this State or any agencies or instrumentalities thereof.

"PM_{10}" means a class of air contaminants which includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 10 micrometers.

"Potential to emit" means the capability of a source operation or of a facility to emit an air contaminant at maximum design capacity, except as constrained by any federally enforceable condition. Such Federally enforceable conditions may include, but are not limited to, the effect of installed control apparatus, restrictions on the hours of operation, and restrictions on the type or amount of material combusted, stored, or processed.

"Process intermediate" means any material used in a process which is neither a raw material nor a product.

"Process level" means the operation of a source, specific to the kind or type of fuel, input material, or mode of operation.

"Process rate" means the quantity per unit of time of any raw material or process intermediate consumed, or product generated, through the use of any equipment, source operation, or control apparatus. For a stationary internal combustion unit or any other fuel burning equipment, this term may be expressed as the quantity of fuel burned per unit of time.

"Product" means the output from a source operation, equipment, or control apparatus. Such outputs may include mixtures, composites, compounds and elemental substances.

"Raw material" means any input to equipment, control apparatus, or a source operation, including fuels, but excluding heat and other forms of energy. Such inputs may include mixtures, composites, compounds and elemental substances.

"Reid vapor pressure" means the absolute vapor pressure of a petroleum product in pounds per square inch (kilopascals) at 100 degrees Fahrenheit (°F) (37.8 degrees Celsius (°C)) as measured by "Method 1—Dry RVP Measurement" or "Method 2—Herzog Semi-Automatic Method" promulgated at 40 CFR 80, Appendix E; or any other test method approved in advance in writing by the Department and the EPA.

"Responsible official" means one of the following:

1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

i. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

ii. The delegation of authority to such representative is approved in advance by the Assistant Director for Air and Environmental Quality Enforcement, Division of Facility Wide Enforcement, Department of Environmental Protection and Energy;

2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

3. For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unity of the agency (for example, a Regional Administrator of EPA); or

4. For affected sources under Title IV of the Clean Air Act:

i. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; and

ii. The designated representative for any other purposes under 40 CFR part 70.

"SCC code" means the eight-position Source Classification Code that provides a detailed analysis of a process. See EPA document "AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants" EPA 450/4-90-003, which may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, 22161, (703) 487-4650 or the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402, (202) 783-3228.

"Seasonal throughput" means the percent of the total yearly operating activity which occurs during each of the following periods:

1. December 1 through February 28/29 (for example, December 1, 1992, through February 28/29, 1993);

2. March 1 through May 31;

3. June 1 through August 31; and

4. September 1 through November 30.

"SIC code" means the Standard Industrial Classification code devised by the United States Office of Management and Budget to classify establishments according to the type of economic activity in which they are engaged.

"Solid particles" means particles of rigid shape and definite volume.

"Source operation" means any process or any identifiable part thereof emitting or having the potential to emit any air contaminant either directly or indirectly into the outdoor atmosphere.

"Stack equivalent" means an aggregation of more than one stack or chimney approved by the Department for use in calculating or measuring air contaminant emissions from a single source operation or a group of source operations with a common exhaust ventilation system.

"Stack or chimney" means a flue, conduit or opening designed, constructed or used for the purpose of emitting any air contaminant into the outdoor atmosphere.

"Sulfur dioxide," or "SO_2," means an air contaminant which is a colorless gas at standard conditions having a molecular composition of one sulfur atom and two oxygen atoms.

"Temporary operating certificate" means a "Certificate to Operate Control Apparatus or Equipment" issued by the Department pursuant to the Air Pollution Control Act, and in particular N.J.S.A. 26:2C-9.2, which is valid for a period not to exceed 90 days.

"Ton" means a unit of weight equal to 2,000 pounds (0.907 metric tons or 907.20 kilograms).

"Total suspended particulate matter," or "TSP," means any air contaminant dispersed in the outdoor atmosphere which exists as solid particles or liquid particles at standard conditions and is measured in accordance with N.J.A.C. 7:27B-1; 40 CFR 60, Appendix A, Methods 5 through 5H; or another method approved by the Department and EPA.

"UTM coordinates" means Universal Transverse Mercator geographic coordinates, specified by the UTM zone, horizontal coordinate and vertical coordinate.

"Volatile organic compound," or "VOC," means any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. For purpose of determining compliance with emissions limits or content standards, VOC shall be measured by test methods which have been approved in writing by the Department. This term does not include the compounds which EPA has excluded from its definition of VOC in the list set forth at 40 CFR 51.100(s)(1), which is incorporated by reference herein, together with all amendments and supplements. The list at 40 CFR 51.100(s)(1) currently includes the compounds and classes of perfluorocarbons set forth below:

Compounds

methane
ethane
methylene chloride (dichloromethane)
1,1,1-trichloroethane (methyl chloroform)
trichlorofluoromethane (CFC-11)
dichlorodifluoromethane (CFC-12)
chlorodifluoromethane (HCFC-22)
trifluoromethane (FC-23)
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
chloropentafluoroethane (CFC-115)
2,2,-dichloro-1,1,1-trifluoroethane (HCFC-123)
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
pentafluoroethane (HFC-125)
1,1,2,2-tetrafluoroethane (HFC-134)
1,1,1,2-tetrafluoroethane (HFC-134a)
1,1-dichloro-1-fluoroethane (HCFC-141b)
1-chloro-1,1-difluoroethane (HCFC-142b)
1,1,1-trifluoroethane (HFC-143a)
1,1-difluoroethane (HFC-152a)

Classes of perfluorocarbons:

(1) Cyclic, branched, or linear, completely fluorinated alkanes;

(2) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

If there is any conflict between the list at 40 CFR 51.100(s)(1) and the list set forth above, the list at 40 CFR 51.100(s)(1) shall control.

7:27-21.2 Applicability

(a) Any owner or operator of a facility is subject to the requirements of this subchapter for any calendar year in which the facility emits or has the potential to emit, directly or indirectly to the outdoor atmosphere, any air contaminant listed at Table 1 at a rate greater than or equal to the applicable threshold. Emission statements are required, starting for the 1992 calendar year, for any air pollutant exceeding the thresholds in Table 1.

TABLE 1
AIR CONTAMINANT REPORTING THRESHOLDS

Air Contaminant	Threshold in Tons per Year
VOC	10
NO_x	25
CO	100
SO_2	100
TSP	100
PM_{10}	100
Pb	5

(b) With respect to the provisions of (a) above, emissions associated with any delivery vessel loading operation shall be included in determining a facility's potential to emit. Emissions from any delivery vessel, used as a storage tank, which is subject to the requirements of N.J.A.C. 7:27-16.2 pursuant to N.J.A.C. 7:27-16.2(m), also shall be included in a facility's potential to emit. All other emissions associated with delivery vessels (for example, motor vehicle tailpipe emissions, locomotives, and tugboats) shall be excluded from a facility's potential to emit.

(c) Notwithstanding (a) above, no facility is required, pursuant to this subchapter, to submit an emission statement for SO_2, TSP, PM_{10}, or Pb with respect to emissions occurring in or before 1992.

(d) Any facility which is solely a retail gasoline dispensing facility is exempt from the requirements of this subchapter.

7:27-21.3 General provisions

(a) Except as provided in N.J.A.C. 7:27-21.2(b), each owner or operator of a facility shall submit to the Department an emission statement pertaining to the emissions released directly or indirectly into the outdoor atmosphere during any calendar year in which the facility is subject to this subchapter pursuant to N.J.A.C. 7:27-21.2. Such emission statement shall include information only for the air contaminant(s) for which the facility's potential to emit equals or exceeds the applicable threshold set forth at N.J.A.C. 7:27-21.2, Table 1; however, if the facility's potential to emit equals or exceeds the reporting threshold for VOC, NO_x, or CO, the facility must report information for VOC, NO_x and CO.

(b) The owner and operator of any facility subject to this subchapter shall be responsible for ensuring compliance with all requirements of this subchapter. Failure to comply with any provision of this subchapter shall subject the owner and operator to civil penalties in accordance with N.J.A.C. 7:27A-3 and applicable criminal penalties including, but not limited to, those set forth at N.J.S.A. 26:2C-19(f)1 and 2. All owners and

operators are jointly and severally liable for such civil and criminal penalties.

(c) Compliance with the emission statement requirements of this subchapter does not relieve any owner or operator of a facility from the responsibility to comply with any other applicable reporting requirements set forth in any Federal or state law, rule, or regulation, or in the conditions of approval of any permit or certificate in effect.

(d) Submittal of an emission statement to the Department, or the Department's acceptance thereof, does not constitute approval by the Department of unauthorized releases of air contaminants into the outdoor atmosphere or of any exceedance of any applicable emission limit established in any Federal or state law, rule, or regulation, or in the conditions of approval of any permit or certificate in effect.

(e) Acceptance or receipt of an emission statement by the Department does not constitute the Department's acceptance of the truth, accuracy or completeness of the emission statement. The Department's failure to act on the information contained in the emission statement at the time of its receipt does not bar the Department from any future action based on that information.

(f) With respect to the provisions of N.J.A.C. 7:27-21.5 below, emissions associated with any delivery vessel loading operation shall be included in a facility's emission statement submittal. Emissions from any delivery vessel, used as a storage tank, which is subject to the requirements of N.J.A.C. 7:27-16.2 pursuant to N.J.A.C. 7:27-16.2(m) also shall be included in a facility's emission statement submittal. All other emissions associated with delivery vessels (for example, motor vehicle tailpipe emissions, locomotives, and tugboats) shall be excluded from the requirements of N.J.A.C. 7:27-21.5(c) through (i).

7:27-21.4 Procedure for submitting an emission statement

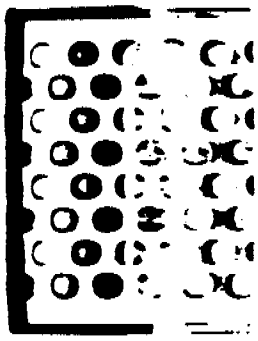
(a) Emission statements shall be submitted to the Department on or before:

1. May 31, 1993 for a facility applicable to this subchapter due to the emissions of 1992; and

2. For each following year, April 15 of each calendar year following any calendar year in which the facility is subject to this subchapter.

(b) Emission statements shall be submitted to the following address:

Chief, Bureau of Air Quality Planning
Department of Environmental Protection
and Energy
CN 418
Trenton, NJ 08625-0418
ATTN: Emission Statements



(c) Emission statements shall be submitted on a form obtainable from the Department at the address listed in (b) above.

(d) Any person submitting an emission statement shall transmit the report to the Department on paper. With the written prior approval of the Department, an emission statement may be submitted on computer diskette or electronically, in a form approved by the Department, in lieu of a submission of an emission statement on paper. Notwithstanding this subsection, certification in accordance with the provisions of N.J.A.C. 7:27-8.24 as required in this subchapter shall accompany any transmission of an emission statement to the Department.

(e) Any person who submits information to the Department may assert a confidentiality claim for that information in accordance with N.J.A.C. 7:27-1.6. Emissions information, as defined at N.J.A.C. 7:27-21.1, is not confidential. The Department will process and evaluate confidentiality claims in accordance with N.J.A.C. 7:27-1.6 through 1.30 inclusive.

7:27-21.5 Required contents of an emission statement

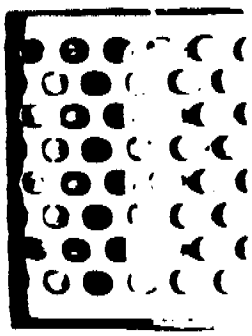
(a) Any person who submits an emission statement to the Department shall include, as an integral part of the report:

1. Certification, in accordance with the requirements of N.J.A.C. 7:27-21.7; and

2. The date of the signature of certification, and the telephone number of the certifying individual.

(b) Emission statements shall include the following facility identification information:

1. The full name of the facility;
2. The parent company name, if applicable;
3. The physical location of the facility (that is, the street address);
4. The mailing address of the facility;
5. The SIC code(s) of the facility;
6. The UTM coordinates or latitude and longitude of the facility;
7. The calendar year of the emissions;
8. Number of employees;
9. Plant contact; and
10. Plant contact phone number.



(c) Emission statements shall include the following operating data for each source operation which has the potential to emit VOC or NO_x or both:

1. Seasonal throughput;
2. Average days of operation per week;
3. Average hours of operation per day; and
4. Total hours of operation for the year.

(d) Emission statements shall include the following information at the process level for NO_x (expressed as molecular weight of NO_2) and VOC:

1. Emissions information:

i. The actual emissions of VOC and NO_x in tons per year;

ii. The average actual emissions of VOC and NO_x in pounds per day of operation during the peak ozone season;

iii. The code for the method used to quantify the actual emissions (see (l) and Table 2 below); and

iv. Any emission factor used to determine actual emissions;

2. Control apparatus information:

i. Current primary, secondary and tertiary control apparatus identification codes (see Table 3 below);

ii. Actual capture efficiencies achieved by the capture device. If the actual capture efficiency is unavailable, the capture device design efficiency shall be used; and

iii. Actual control efficiencies achieved by the control apparatus. If the actual control efficiency is unavailable, the control apparatus design efficiency shall be used; and

3. Process rate data:

i. The annual process rate; and

ii. The average process rate per day of operation during the peak ozone season.

(e) Emission statements shall include the following operating data for each source operation which has the potential to emit CO:

1. Seasonal throughput;
2. Average days of operation per week;
3. Average hours of operation per day; and
4. Total hours of operation for the year.

(f) Emission statements shall include the following information at the process level for CO:

1. Emissions information:

i. The actual emissions of CO in tons per year;

ii. The average actual emissions of CO in pounds per day of operation during the peak ozone season;

iii. The average actual emissions of CO in pounds per day of operation during the peak carbon monoxide season;

iv. The code for the method used to quantify the actual emissions (see (l) and Table 2 below); and

v. Any emission factor used to determine actual emissions;

2. Control apparatus information:

i. Current primary, secondary and tertiary control apparatus identification codes (see Table 3);

ii. Actual capture efficiencies achieved by the capture device. If the actual capture efficiency is unavailable, the capture device design efficiency shall be used; and

iii. Actual control efficiencies achieved by the control apparatus. If the actual control efficiency is unavailable, the control apparatus design efficiency shall be used; and

3. Process rate data:

i. The annual process rate;

ii. The average process rate per day of operation during the peak ozone season; and

iii. The average process rate per day of operation during the peak carbon monoxide season.

(g) Emission statements shall include the following operating data for each source operation which has the potential to emit SO_2, TSP, PM_{10} and/or Pb:

1. Seasonal throughput;
2. Average days of operation per week;
3. Average hours of operation per day; and
4. Total hours of operation for the year.

(h) Emission statements shall include the following information at the process level for SO_2, TSP, PM_{10} and/or Pb:

1. Emissions information:

i. The actual emissions in tons per year;

ii. The code for the method used to quantify the acutal emissions (see (l) and Table 2 below); and

iii. Any emission factor used to determine actual emissions;

2. Control apparatus information:

i. Current primary, secondary and tertiary control apparatus identification codes (see Table 3);

ii. Actual capture efficiencies achieved by the capture device. If the actual capture efficiency is unavailable, the capture device design efficiency shall be used; and

iii. Actual control efficiencies achieved by the control apparatus. If the actual control efficiency is unavailable, the control apparatus design efficiency shall be used; and

3. Process rate data:

i. The annual process rate; and

ii. The average process rate per day of operation during the peak ozone season.

(i) The following information may replace the more detailed information required at (c) through (h) above only for any source operation which has the potential to emit less than 0.1 ton per year of Pb or less than

one ton per year of any other air contaminant required to be reported pursuant to this subchapter:

1. The following information shall be supplied:

i. A description of each source operation; and

ii. Actual emissions of each air contaminant emitted from each source operation shall be estimated at 0.1 ton per year for Pb and one ton per year for any other air contaminant; and

iii. Code 10 from Table 2 below; or

2. The following information shall be supplied:

i. A description of each source operation;

ii. Estimated actual emission in tons per year;

iii. The code for the method used to quantify the actual emissions (see (l) and Table 2 below); and

iv. Any emission factor used to determine actual emissions.

(j) Emission statements shall include cumulative total fugitive emissions for the facility for all fugitive emissions that cannot be reported in the information pursuant to (c) through (i) above. Such fugitive emissions shall be expressed:

1. In tons per year;

2. For CO, VOC and NO_x emissions, in average pounds per day of operation during the peak ozone season; and

3. For CO emissions, in average pounds per day of operation during the peak carbon monoxide season.

(k) Emission statements shall also include any other information required by any Federal regulation or emission statement guidance published by EPA. Any additional information required by this provision will be published in a New Jersey Register notice and will be clearly indicated on the emission statement forms for the applicable year.

(l) The method used for quantifying actual emissions for a source operation for use in preparing emission information required in (d)1, (f)1, (h)1 or (i)2 above shall be the method from Table 2 which is reasonably available and which the departing entity believes best estimates the actual emissions from the source operation, unless an operating permit pursuant to Title V of the Federal Clean Air Act has been issued by the Department for the facility. In such case, the method used shall be the method specified in the operating permit.

TABLE 2
CODES FOR METHODS OF QUANTIFYING ACTUAL EMISSIONS

Method	Code
Emissions based on Continuous Emission Monitoring	1
Emissions based on source test or other measurements	2
Emissions based on material balance using engineering knowledge of the process	3
Emissions based on AP-42	4
Emissions based on best engineering judgment	5
Emissions based on a state or local agency's emission factor	6
New construction not yet operational; emissions are zero	7
Source closed, operation ceased	8
Emissions to be computer calculated by the Department or EPA based on standard emission factor (SCC emission factor file)	9†
Emissions to be computer calculated by the Department or EPA based on other approved emission factor	10†
Emissions estimated at one ton per year (0.1 ton per year for Pb)	11‡

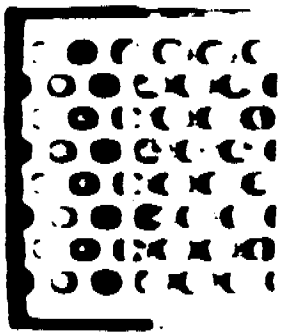
†Codes 8 and 9 may only be used for selected source operations with prior notice or approval from the Department

‡Code 10 may only be used for source operations which meet the criteria to report pursuant to (i)1 above

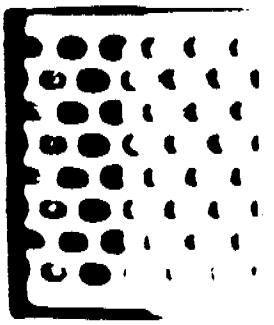
TABLE 3
CONTROL APPARATUS IDENTIFICATION CODES

Control Apparatus	Code
No control apparatus	000
Wet scrubber high efficiency	001
Wet scrubber medium efficiency	002
Wet scrubber low efficiency	003
Gravity collector high efficiency	004
Gravity collector medium efficiency	005

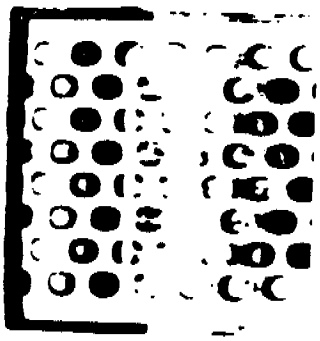
Gravity collector low efficiency	006
Centrifugal collector high efficiency	007
Centrifugal collector medium efficiency	008
Centrifugal collector low efficiency	009
Electrostatic precipitator high efficiency	010
Electrostatic precipitator medium efficiency	011
Electrostatic precipitator low efficiency	012
Gas scrubber—general	013
Mist eliminator high velocity	014
Mist eliminator low velocity	015
Fabric filter high temperature	016
Fabric filter medium temperature	017
Fabric filter low temperature	018
Catalytic afterburner	019
Catalytic afterburner-heat exchange	020
Direct flame afterburner	021
Direct flame afterburner-heat exchange	022
Flaring	023
Modified furnace or burner	024
Staged combustion	025
Flue gas recirculation	026
Reduced combustion-air preheat	027
Steam or water injection	028
Low excess-air firing	029
Fuel-low nitrogen content	030
Air injection	031
Ammonia injection	032
Control of % 0_2 in combustion air	033
Wellman-Lord/sodium sulfate scrubber	034
Magnesium oxide scrubbing	035
Dual alkali scrubbing	036
Citrate process scrubbing	037
Ammonia scrubbing	038
Catalytic oxidation—flue gas desulfuring	039
Alkalized alumina	040
Dry limestone injection	041
Wet limestone injection	042
Sulfuric acid plant—contact process	043
Sulfuric acid plant—double contact process	044
Sulfur plant	045
Process change	046



Vapor recovery system	047
Activated carbon adsorption	048
Liquid filtration system	049
Packed-gas absorption	050
Tray-type gas absorption column	051
Spray Tower	052
Venturi scrubber	053
Process enclosed	054
Impingement plate scrubber	055
Dynamic separator (dry)	056
Dynamic separator (wet)	057
Mat or panel filter	058
Metal fabric filter screen	059
Process gas recovery	060
Dust suppressor—water spray	061
Dust suppressor—chemical stabilization/wet agents	062
Gravel bed filter	063
Annular ring filter	064
Catalytic reduction	065
Molecular sieve	066
Wet lime slurry scrubbing	067
Alkaline fly ash scrubbing	068
Sodium carbonate scrubbing	069
Sodium-alkaline scrubbing	070
Fluid bed dry scrubber	071
Tube and shell condenser	072
Refrigerated condenser	073
Barometric condenser	074
Single cyclone	075
Multiple cyclone without fly ash reinjection	076
Baffle	078
Multiple cyclone with fly ash injection	079
Chemical oxidation	080
Chemical reduction	081
Ozonation	082
Chemical neutralization	083
Activated clay adsorption	084
Wet cyclonic separator	085
Water curtain	086
Nitrogen blanket	087
Conservation vent	088
Bottom filling	089



Conversion to variable vapor space tank	090
Conversion to floating roof tank	091
Conversion to pressurized tank	092
Submerged filling	093
Underground tank	094
White paint	095
Vapor lock balance recovery system	096
Installation of secondary seal for external floating roof tank	097
Moving bed dry scrubber	098
Miscellaneous control devices	099
High efficiency particulate air filter	101



7:27-21.6 Recordkeeping requirements

(a) Each owner or operator of a facility subject to this subchapter shall maintain the following records on the operating premises for a period of five years from the due date of each emission statement:

1. A copy of the emission statement submitted to the Department; and

2. Records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

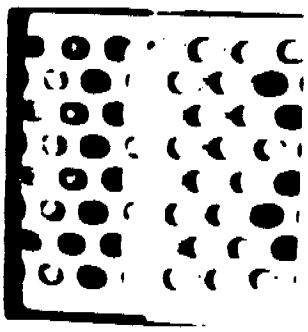
(b) Upon the request of the Department, the owner or operator of the facility shall make these records available at the facility for inspection by any representative of the Department during normal business hours.

7:27-21.7 Certification of information

(a) Any person who submits an emission statement to the Department shall include, as an integral part of the emission statement, the following two-part certification:

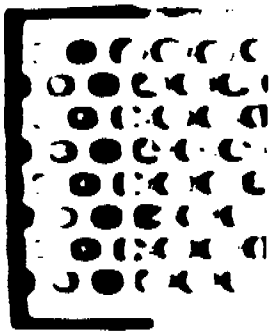
1. A certification signed by the individual or individuals (including any consultants) with direct knowledge of and responsibility for the information contained in the emission statement. The certificate shall state:

"I certify under penalty of law that I believe the information provided in this emission statement is true, accurate and complete. For those portions of the above information based on estimates, those estimates are the result of good faith application of sound professional judgment, using techniques, factors, or calculations approved by the Department or EPA, or generally accepted in the trade. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."



2. A certification signed by a responsible official, as defined at N.J.A.C. 7:27-21.1, which states:

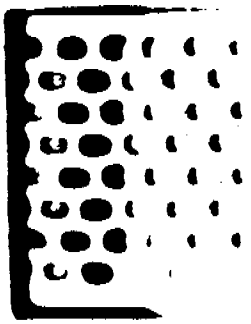
"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this emission statement and all attached documents and, based on my inquiry of those officials immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I certify that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe any estimates are the result of good faith application of sound professional judgment, using techniques, factors, or standards approved by the Department or EPA, or generally accepted in the trade. I am aware that there are significant civil and criminal penalties, including fines or imprisonment or both, for submitting false, inaccurate or incomplete information."



7:27-21.8 Severability

If any section, subsection, provision, clause or portion of this subchapter or the application thereof to any person or circumstance is adjudged invalid or unconstitutional by a court of competent jurisdiction, the remainder of this subchapter and the application thereof to other persons or circumstances shall not be affected thereby, and shall remain in full force and effect.

SUBCHAPTER 22. (RESERVED)



ii. For a source not used to generate electricity, compliance with this subchapter for the 2003 control period by May 1, 2003 would create undue risk for the source or its associated industry to a degree that is comparable to the risk described in (b)6i above;

iii. It would not be possible for the source to comply with this subchapter by generating early reduction allowances or acquiring early reduction allowances from other sources;

iv. It would not be possible to comply with this subchapter by acquiring sufficient allowances from other persons who hold allowances; and

v. The owner or operator has made a written commitment to the Department to install advanced NO_x control systems or to repower, either of which is designed to achieve a 90 percent NO_x emission rate reduction.

7. The Department shall review all requests made pursuant to (b)6 above, and shall ensure the public an opportunity, through a public hearing process, to comment on the appropriateness of the allocating compliance supplement pool allowances to the requests interimly approved by the Department before allocating the allowances pursuant to (b)4 above.

New Rule, R.2000 d.351, effective August 21, 2000 (operative September 29, 2000).
See: 31 N.J.R. 2100(a), 32 N.J.R. 3119(a).

APPENDIX

CHEMICALS DEFINING SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

CAS #	Chemical
105-57-7	Acetal
75-07-0	Acetaldehyde
107-89-1	Acetaldol
60-35-5	Acetamide
103-84-4	Acetanilide
64-19-7	Acetic acid
108-24-7	Acetic anhydride
67-64-1	Acetone
75-86-5	Acetone cyanohydrin
75-05-8	Acetonitrile
96-86-2	Acetophenone
75-36-5	Acetyl chloride
74-86-2	Acetylene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
124-04-9	Adipic acid
111-69-3	Adiponitrile
**	Alkyl naphthalenes
107-18-6	Allyl alcohol
107-05-1	Allyl chloride
1321-11-5	Aminobenzoic acid
111-41-1	Aminoethylethanolamine
123-30-8	p-Aminophenol
628-63-7, 123-92-2	Amyl acetates
71-41-0,†	Amyl alcohols
110-58-7	Amyl amine
543-59-9	Amyl chloride
110-66-7,†	Amyl mercaptans
1322-06-1	Amyl phenol
62-53-3	Aniline
142-04-1	Aniline hydrochloride
29191-52-4	Anisidine
100-66-3	Anisole
118-92-3	Anthranilic acid
84-65-1	Anthraquinone
100-52-7	Benzaldehyde
55-21-0	Benzamide
71-43-2	Benzene
98-48-6	Benzenedisulfonic acid
98-11-3	Benzenesulfonic acid
134-81-6	Benzil
76-93-7	Benzilic acid
65-85-0	Benzoic acid
119-53-9	Benzoin
100-47-0	Benzonitrile
119-61-9	Benzophenone
98-07-7	Benzotrichloride
98-88-4	Benzoyl chloride
100-51-6	Benzyl alcohol
100-46-9	Benzylamine
120-51-4	Benzyl benzoate
100-44-7	Benzyl chloride
98-87-3	Benzal chloride
92-52-4	Biphenyl
80-05-7	Bisphenol A
108-86-1	Bromobenzene
27497-51-4	Bromonaphthalene
106-99-0	Butadiene
106-98-9	1-butene
123-86-4	n-butyl acetate
141-32-2	n-butyl acrylate
71-36-3	n-butyl alcohol
78-92-2	s-butyl alcohol
75-65-0	t-butyl alcohol
109-73-9	n-butylamine
13952-84-6	s-butylamine
75-64-9	t-butylamine
98-73-7	4-tert-butyl benzoic acid
107-88-0	1,3-butylene glycol
123-72-8	n-butyraldehyde
107-92-6	Butyric acid
106-31-0	Butyric anhydride
109-74-0	Butyronitrile
105-60-2	Caprolactam
75-15-50	Carbon disulfide
558-13-4	Carbon tetrabromide
56-23-5	Carbon tetrachloride
9004-35-7	Cellulose acetate
79-11-8	Chloroacetic acid
108-42-9	m-chloroaniline
95-51-2	o-chloroaniline
106-47-8	p-chloroaniline
35913-09-8	Chlorobenzaldehyde
108-90-7	Chlorobenzene
†	Chlorobenzoic acid
†	Chlorobenzotrichloride
1321-03-5	Chlorobenzoyl chloride
25497-29-4	Chlorodifluoromethane

CAS #	Chemical
75-45-6	Chlorodifluoroethane
67-66-3	Chloroform
25586-43-0	Chloronaphthalene
88-73-3	o-chloronitrobenzene
100-00-5	p-chloronitrobenzene
25167-80-0	Chlorophenols
126-99-8	Chloroprene
7790-94-5	Chlorosulfonic acid
108-41-8	m-chlorotoluene
95-49-8	o-chlorotoluene
106-43-4	p-chlorotoluene
75-72-9	Chlorotrifluoromethane
108-39-4	m-cresol
95-48-7	o-cresol
106-44-5	p-cresol
1319-77-3	Mixed cresols
1319-77-3	Cresylic acid
4170-30-0	Crotonaldehyde
3724-65-0	Crotonic acid
98-82-8	Cumene
80-15-9	Cumene hydroperoxide
372-09-8	Cyanoacetic acid
506-77-4	Cyanogen chloride
108-80-5	Cyanuric acid
108-77-0	Cyanuric chloride
110-82-7	Cyclohexane
108-93-0	Cyclohexanol
108-04-1	Cyclohexanone
110-83-8	Cyclohexene
108-91-8	Cyclohexylamine
111-78-4	Cyclooctadiene
112-30-1	Decanol
123-42-2	Diacetone alcohol
27576-04-1 †	Diaminobenzoic acid
	Dichloroaniline
541-73-1	m-dichlorobenzene
95-50-1	o-dichlorobenzene
106-46-7	p-dichlorobenzene
75-71-8	Dichlorofluoromethane
107-06-2	1,2-dichloroethane (EDC)
111-44-4	Dichloroethyl ether
96-23-1	Dichlorohydrin
26952-23-8	Dichloropropene
101-83-7	Dicyclohexylamine
109-89-7	Diethylamine
111-46-6	Diethylene glycol
112-36-7	Diethylene glycol diethyl ether
111-96-6	Diethylene glycol dimethyl ether
112-34-5	Diethylene glycol monobutyl ether
124-17-4	Diethylene glycol monobutyl ether acetate
111-90-0	Diethylene glycol monoethyl ether
112-15-2	Diethylene glycol monoethyl ether acetate
111-77-3	Diethylene glycol monomethyl ether
64-67-5	Diethyl sulfate
75-37-6	Difluoroethane
25167-70-8	Diisobutylene
26761-40-0	Diisodecyl phthalate
27554-26-3	Diisooctyl phthalate
674-82-8	Diketene
124-40-3	Dimethylamine
121-69-7	N,N-dimethylaniline
115-10-6	N,N-dimethyl ether
68-12-2	N,N-dimethylformamide
57-14-7	Dimethylhydrazine
77-78-1	Dimethyl sulfate
75-18-3	Dimethyl sulfide
67-68-5	Dimethyl sulfoxide
120-61-6	Dimethyl terephthalate
99-34-3	3,5-dinitrobenzoic acid
51-28-5	2,4-dinitrophenol
25321-14-6	Dinitrotoluene
123-91-1	Dioxane
646-06-0	Dioxolane
122-39-4	Diphenylamine
101-84-8	Diphenyl oxide
102-08-9	Diphenyl thiourea
25265-71-8	Dipropylene glycol
25378-22-7	Dodecene
28675-17-4	Dodecylaniline
27193-86-8	Dodocylphenol
106-89-8	Epichlorohydrin
64-17-5 †	Ethanol
	Ethanolamines
141-78-6	Ethyl acetate
141-97-9	Ethyl acetoacetate
140-88-5	Ethyl acrylate
75-04-7	Ethylamine
100-41-4	Ethylbenzene
74-96-4	Ethyl bromide
9004-57-3	Ethylcellulose
75-00-3	Ethyl chloride
105-39-5	Ethyl chloroacetate
105-56-6	Ethylcyanoacetate
74-85-1	Ethylene
96-49-1	Ethylene carbonate
107-07-3	Ethylene chlorohydrin
107-15-3	Ethylenediamine
106-93-4	Ethylene dibromide
107-21-1	Ethylene glycol
111-55-7	Ethylene glycol diacetate
110-71-4	Ethylene glycol dimethyl ether
111-76-2	Ethylene glycol monobutyl ether
112-07-2	Ethylene glycol monobutyl ether acetate
110-80-5	Ethylene glycol monoethyl ether
111-15-9	Ethylene glycol monoethyl ether acetate
109-86-4	Ethylene glycol monomethyl ether
110-49-6	Ethylene glycol monomethyl ether acetate
122-99-6	Ethylene glycol monophenyl ether
2807-30-9	Ethylene glycol monopropyl ether
75-21-8	Ethylene oxide
60-29-7	Ethyl ether
104-76-7	2-ethylhexanol
122-51-0	Ethyl orthoformate
95-92-1	Ethyl oxalate
41892-71-1	Ethyl sodium oxalacetate
50-00-0	Formaldehyde
75-12-7	Formamide
64-18-6	Formic acid
110-17-8	Fumaric acid
98-01-1	Furfural
56-81-5	Glycerol
26545-73-7	Glycerol dichlorohydrin
25791-96-2	Glycerol triether
56-40-6	Glycine
107-22-2	Glyoxal
118-74-1	Hexachlorobenzene
67-72-1	Hexachloroethane
36653-82-4	Hexadecanol
124-09-4	Hexamethylenediamine
629-11-8	Hexamethylene glycol
100-97-0	Hexamethylenetramine